

Amendments to the Specification

Please add the following abstract, which is included herewith on a separate page:

The invention provides adjuvants, immunogenic compositions, and methods useful for polynucleotide-based vaccination and immune response. In particular, the invention provides an adjuvant of cytofectin:co-lipid mixture wherein cytofectin is GAP-DMORIE.

Please insert the sequence listing provided herewith at the end of the application.

Please replace the paragraph beginning on page 29, line 3, with the following paragraph:

Single cell suspensions of splenocytes were pelleted and resuspended in RPMI 1640 medium containing L-glutamine and 25 mM HEPES and supplemented with penicillin (100 U/ml), streptomycin (100 µg/ml), 55 µM β-mercaptoethanol and 10 % FBS. Unless otherwise noted, all tissue culture media and reagents were obtained from Gibco BRL Life Technologies (Rockville, MD). Then, 2.5×10^7 splenocytes were cultured for 5 days in 25 cm² tissue culture flasks in a total of 10 ml of media with NP₁₄₇₋₁₅₅ peptide (H-2K^d TYQRTRALV) (SEQ ID NO: 1) or β-gal₈₇₆₋₈₈₄ peptide (H-2L^d TPHPARIGL) (SEQ ID NO: 2) at 1 µg/ml and recombinant murine IL-2 (Roche Molecular Biochemicals, Indianapolis, IN) at 0.5 U/ml.

Please replace the paragraph beginning on page 29, line 12, with the following paragraph:

For the CTL assay, P815 cells were labeled with 0.15 mCi Na₂⁵¹CrO₄ (NEN Life Science Products, Boston, MA) in 30 µl saline at 37°C for 35 minutes. Labeled cells were pulsed with 20 µg NP peptide or β-gal peptide (H-2L^d TPHPARIGL) (SEQ ID NO: 2) in 1 ml RPMI 1640 media at 37°C for 40 minutes or were used unpulsed. Duplicate titrations of splenocytes were prepared by serially diluting the cells 1:3 in 96 well round bottom plates (ICN Biomedicals, Aurora, OH). Target cells were added at 1 x 10⁴ cells/well in a final volume of 200 µl/well at the designated effector:target ratios (E:T). The plates were centrifuged and incubated for 4 hours at 37°C with 5 % CO₂. Counts per minute were determined for 100 µl of supernatant from each well. Specific lysis was calculated as % specific lysis = [(a-b)/(c-b)]100 where a is the average cpm released in the presence of effectors, b is the average cpm released from target cells incubated in media only and c is the cpm released from target cells in the presence of 1% Triton-X 100.

Please replace the paragraph beginning on page 42, line 29 and ending on page 43, line 7, with the following paragraph:

Spleens were removed from euthanized mice at 11-12 weeks after the first injection, and 2.5 X 10⁷ splenocytes were cultured for 5 days in 6 well plates in a total of 5 ml of RPMI 1640 medium (unless otherwise noted, all tissue culture reagents were obtained from Gibco BRL Life Technologies, Rockville, MD) containing L-glutamine and 25 mM HEPES and supplemented with penicillin (100 U/ml), streptomycin (100 µg/ml), 5.5 x 10⁻⁵ M β-mercaptoethanol and 10% FBS (10% media) with either

NP₁₄₇₋₁₅₅ peptide (H-2K^d TYQRTRALV) (SEQ ID NO: 1) or β -gal₈₇₆₋₈₈₄ peptide (H-2L^d TPHPARIGL) (SEQ ID NO: 2) at 1 μ g/ml and recombinant murine IL-2 (Roche Molecular Biochemicals, Indianapolis, IN) at 0.5 U/ml.